

What is claimed is:

1. A delay profile making method comprising, receiving a CDMA radio signal under a multipath condition; buffering the received signal in a storage memory and thereafter 5 performing a correlation detection of a symbol sequence using a correlation detector, said symbol sequence contained in said received signal and comprising a repetition of a unit pattern of +1 and -1; performing an in-phase addition using the obtained correlation, 10 where said unit pattern is a processing unit; and performing a power calculation of the received signal utilizing the in-phase addition value and making a delay profile,

wherein said storage memory adopts a multibank 15 configuration comprising a first bank and a second bank; and

wherein received data corresponding to the first path is stored in the first bank and the received data corresponding to the second path is next stored in the 20 second bank, while, in parallel, said received data corresponding to the first path is read from the first bank and supplied to said correlation detector where correlation detection processing is performed.

25 2. The delay profile making method according to claim 1,

wherein said storage memory is configured with an

entire memory capacity thereof smaller than a capacity of data corresponding to a search period in delay profile making; and

wherein, to accommodate the received data 5 corresponding to the second path in the second bank of said storage memory with certainty, regardless of a spatial relationship between the first path and the second path in said search period in delay profile making, a storage timing to the first bank and the second bank of 10 said storage memory is changed adaptively based on information acquired in advance regarding the timing of the received signal.

3. The delay profile making method according to claim 15 1, wherein the symbol sequence that is contained in a received signal and that comprises a repetition of a unit pattern of +1 and -1 is a symbol sequence of a pilot signal of a secondary common pilot channel of a common pilot channel, said common pilot channel being a physical layer 20 in W-CDMA communication system.

4. A delay profile making apparatus, comprising:
a storage memory that buffers a CDMA radio signal received under a multipath condition;
25 a correlation detector that performs a correlation detection of a symbol sequence contained in said received signal and comprising a repetition of a unit pattern of

+1 and -1;

an in-phase adder that performs an in-phase addition using the obtained correlation and adopting said unit pattern as a processing unit;

5 a power calculator that performs a power calculation of the received signal utilizing the in-phase addition value and makes a delay profile,

wherein said storage memory adopts a multibank configuration comprising a first bank and a second bank;

10 and

wherein received data corresponding to the first path is stored in the first bank and the received data corresponding to the second path is next stored in the second bank, while, in parallel, said received data 15 corresponding to the first path is read from the first bank and supplied to said correlation detector where correlation detection processing is performed.

5. The delay profile making apparatus according to
20 claim 4,

wherein said storage memory is configured with an entire memory capacity thereof smaller than a capacity of data corresponding to a search period in delay profile making; and

25 wherein, to accommodate the received data corresponding to the second path in the second bank of said storage memory with certainty, regardless of a

spatial relationship between the first path and the second path in said search period in delay profile making, a storage timing to the first bank and the second bank of said storage memory is changed adaptively based on 5 information acquired in advance regarding the timing of the received signal.

6. The delay profile making apparatus according to claim 4, wherein the symbol sequence that is contained 10 in a received signal and that comprises a repetition of a unit pattern of +1 and -1 is the(a?) symbol sequence of a pilot signal of a secondary common pilot channel of a common pilot channel, said common pilot channel being a physical layer in W-CDMA communication system.

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7. A receiver that supports W-CDMA communication system standard, comprising the delay profile making apparatus of claim 4.